

# Massachusetts Bay Community College Sustainability Plan



**Date:** 5/23/05

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This Sustainability Plan has been reviewed and approved by ( Kim Gazzola ) of  
( Massachusetts Bay Community College ) on ( August 27, 2005 ).

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*Signature of Agency Head or other Appropriate Designee*

## 1. Agency Information, Impact Identification and Sustainability Team

### 1.1 Agency Description and Scope

Massachusetts Bay Community College is one of 15 community colleges operated by the State of Massachusetts. The College has three locations and services approximately 5000 full and part time students, and 300 faculty and staff. The main campus is located at 50 Oakland St., Wellesley, MA. and consists of three buildings. The Carey/1919/1954 Building (196,263 sq.ft.) the recreational center (6,649 sq.ft.), and the Annex Building (7,773 sq.ft.). The Framingham Campus (114,964 sq. ft.) is located at 19 Flagg Dr, Framingham, MA. The property is owned by the Town of Framingham, and maintained by the State. This campus is primarily a health science campus. The Ashland Technology Center is located at 250/270 Elliott St., Ashland MA. The primary mission of this center is student training in auto technology.

### 1.2 Agency Impacts on the Environment and Human Health

The College operates various classrooms, laboratories, power plant, maintenance shops, dining halls, and gym facilities. All of these have a direct environmental impact on our operational activities.

<i>Buildings:</i>	chemical storage, chemical waste disposal, cleaning agents, water and energy usage/conservation.
<i>Offices:</i>	paper use, disposal, recycling, computer disposal
<i>Parking:</i>	large parking lots generating storm water runoff

#### *College usage:*

	<b>FY 2004</b>	<b>FY 2005</b>
Electricity	5,666,319 kwh	6,865,289 kwh
Water	3,172 CCF	3,741 CCF
#4 Oil	329 barrels	1,246 barrels
Gas	7,655,332 therms	3,994,564 therms

### **1.3 Agency Operational Costs**

	<b>FY 2004</b>	<b>FY 2005</b>
Electricity	\$595,642 *	\$669,376 *
Water	\$25,664	\$30,159
#4 Oil	\$14,467	\$62,836
Gas	\$110,908	\$67,640
Hazardous waste	\$38,053	\$45,723

\* Electricity is high due to an all-electric campus in Framingham. See priority and goals section #2.

### **1.4 Agency Sustainability Team Members**

Kim Gazzola Vice President Administration & Finance/CFO

Vacant- Director of Administrative Services

Fred Yule - Director of Facilities

Bryant Fay- Assistant Director of Facilities

## **2. Long-Term Goals/Vision**

### **2.1 Long-Term Goals**

1. Massachusetts Bay Community College needs to establish a formal environmental management system (EMS) to reduce its environmental impact on its surroundings. This system would require the creation of committees, as well as, individual accountabilities to oversee the management of hazardous waste removal, lab chemical reduction protocols, energy usage, safety protocols for spill prevention, and storm water legislation.
2. Consider researching well water supply for cooling towers.
3. Consider alternative fuel vehicles over gas fueled fleet vehicles on a replacement basis.

### 3. Short-term Actions and Priorities Priority and Areas Goals

During the last several years, Massachusetts Bay Community College has worked with DCAM and an energy management company (Ameresco) to upgrade the heating/cooling, plumbing, and lighting systems at the Wellesley Campus. This \$3M upgrade required the installation of a new power plant and re-piping of approximately 50% of the occupancy space at this location. Massachusetts Bay Community College is presently in the process of validating the FY04 \$186,000 energy savings reported by Ameresco with a third party engineering firm.

The College, with DCAMs assistance, is presently seeking an energy management company to design and implement energy conservation measures to the Framingham Campus. Preliminary estimates show a potential energy savings of \$141,743.

Massachusetts Bay Community College will also actively pursue the possibility of re-piping the remaining 50% of the occupied spaces at the Wellesley Campus in order to capture any energy savings. The original power plant installation was designed to accommodate the remainder of the campus.

### 4. Management Systems and Institutionalization

#### 4.1 *Integrating Environmental Impacts into Key Decision Points*

A. New construction and renovations- the design process will include a description of the environmental, and energy impact of the projects as well as cost estimates.

B. Facilities Management- Continue to evaluate the recycling costs, and energy cost comparisons.

C. Purchasing- Incorporate environmental requirements (such as construction drain off) in to bid specifications. Review State purchasing contracts for environmentally friendly alternative products.

D. Discuss Sustainability- sustainability is to be discussed at staff meetings and articles to the college community through the college newspaper.

#### 4.2 **Education and Training of Staff**

Use staff meetings to discuss recycling, storm water protocols, and hazardous waste management subjects

Arrange training for appropriate staff members.

Continue to inform and request funding from executive management for an Environmental System.

#### 4.3 **Management Systems**

Presently Massachusetts Bay Community College does not have a formal EMS system. In April 2005, Curran and Woodward, a consulting environmental engineering firm, submitted a proposal

for a total review of the College's sustainability efforts. This proposal has been forward to the executive level for review.

There is a formal process presently in place to monitor and dispose of hazardous waste. The process is maintained by Triumvirate and Clean Harbors.

## **5. Tracking Progress and Program/Plan Review**

The College has a formal waste disposal process. The overall process is viewed monthly by Kells Inventory Services for compliance.

The College has an aggressive recycling program that is monitored continuously and has recently added a cardboard compactor that has removed 11 tons of cardboard from the waste stream this year. Agency Tracking and Reporting Form

### **5.1 Agency Tracking and Reporting Form**

Presently the Facilities Department is responsible for this process. With the contracting of an environmental consultant, Massachusetts Bay should be able to make this process an agency program with assigned responsibilities from other departments

### **5.2 Continuous Improvement**

Presently Triumvirate and Clean Harbors monitors the College's sustainability efforts. Kells Inventory Service monitors the efforts of these contractors.

The Assist Director of Operations monitors the recycle program. This process is continually reviewed. See attached recycling report from Institution Recycling Network, Inc.

Presently the Facilities Director is responsible for the sustainability effort. With the hiring of an environmental consultant it is hoped that an agency wide program involving all managers will evolve.

## Agency Action Steps

<b>Sustainable Goal</b>	<b>Benefits</b>	<b>Specific Tasks</b>	<b>Responsible Staff</b>	<b>Timeline</b>
<i>Utilize 3<sup>rd</sup> party engineering firm to validate Wellesley ECM's</i>	<i>Verify savings</i>	<i>Call RES engineering to validate Ameresco measured goals.</i>	<i>Fred Yule-Director of Facilities</i>	<i>June 1.2005</i>
Implement energy conservation measures at the Framingham Campus	Potential energy savings of \$141k	Massachusetts Bay/DCAM are soliciting bids for energy management proposals	Joe Sergi-Asst. VP Fred Yule- Dir of Facilities	Proposals due July 15,2005
Implement ECM's to remaining Wellesley Campus	Potential energy savings	Massachusetts Bay/DCAM organize bid package for energy management proposals.	Joe Sergi-Asst VP Fred Yule-Dir of Facilities.	FY2006 for bid package